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MoussiPATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Kazuo TANAKA

Group Art Unit: 2811

Application No.: 09/586,963

Examiner: C. Nguyen

Filed: June 5, 2000

Docket No.: 039894.01

For: SEMICONDUCTOR DEVICE AND A METHOD FOR MAKING THE SAME THAT
PROVIDE ARRANGEMENT OF A CONNECTING REGION FOR AN EXTERNAL
CONNECTING TERMINAL

REQUEST FOR RECONSIDERATION

Director of the U.S. Patent and Trademark Office
Washington, D.C. 20231

Sir:

In reply to the June 26, 2002, 2002 Office Action, the shortened statutory period for reply being extended by the attached Petition for Extension of Time, Applicant respectfully requests reconsideration of this application in view of the following remarks. Claims 2-8, 12-14 and 21 are pending. Claims 2-3, 6 and 12 are presently under consideration, and non-elected claims 4-5, 7-8, 13-14 and 21 have been withdrawn by the Examiner.

The Office Action rejects claims 2, 3, 6 and 12 under 35 U.S.C. §103(a) over U.S. Patent No. 5,739,587 to Sato in view of U.S. Patent No. 5,736,791 to Fujiki et al. This rejection is respectfully traversed.

Neither Sato nor Fujiki alone, or in combination, teach, suggest or render all of the subject matter of independent claim 2. In particular, the references fail to teach or suggest at least a first or a second through hole provided on the first and second insulating interlayers

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respectively. The applied references also fail to teach or suggest providing conductive layers under a bonding pad.

Specifically, Sato fails to teach or suggest openings being formed in the second conductive layer which is sandwiched between two conductive layers. See, e.g., Figs. 10A, 11 and 12.

Fujiki fails to cure the deficiencies of Sato described above with respect to independent claim 2. In particular, Fujiki fails to teach or suggest a plurality of the conductive layers being disposed under the bonding pad.

Neither Sato or Fujiki provide any suggestion or modification, in the references themselves to modify or combine their teachings. For argument sake, combining the references would fail to teach or suggest providing proper determination of the openings through the conductive layer. There is absolutely no suggestion or motivation to make this proposed modification. These references fail to provide the advantages of the claimed invention and/or solve the problem which is solved by the present claimed invention.

The present invention is directed to, *inter alia*, preventing the crack formation to the insulating interlayer 150 or 160 which is sandwiched between two electrodes 100, 300. See, e.g., the specification at page 4, lines 13-26, page 14, lines 15-27 and Fig. 21A. Unless the openings are formed in the conductive layer, which is sandwiched between the two conductive layers (or electrodes 100, 300), cracks X, Y are formed in the insulation interlayer 150, 160 which is sandwiched between these conductive layers (electrodes 100, 300). As mentioned above, none of the applied references teach, suggest, or render obvious the features or advantages of the claimed invention.

Accordingly, the Office Action fails to establish a prima facie case of obviousness, as the applied references fail to teach, suggest, or render all of the subject matter of independent claim 2. Accordingly, the applied references also fail to render obvious the subject matter of



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claims 3-6 and 12 which depend from claim 2. Withdrawal of the rejection under 35 U.S.C. §103(a) is therefore respectfully solicited.

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number set forth below.

Respectfully submitted,

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Robert Z. Evora
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JAO:RZE/dmw

Date: November 25, 2002

Attachment:

Petition for Extension of Time

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